# **KeyTec® D-LUCIFERIN POTASSIUM SALT**





### Introduction

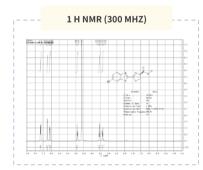
VKEY-BIO offers an exceptional quality D-luciferin potassium salt, known as KeyTec® D-luciferin potassium salt. This product exhibits outstanding chemical purity, superior luminescent performance, and excellent solubility, making it ideal for a wide range of applications.

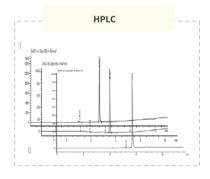
KeyTec® D-luciferin potassium salt possesses excellent water solubility and lipid solubility, making it the preferred substrate for firefly luciferase assays. In the presence of ATP,  $Mg^{2+}$ , and  $O_2$ , firefly luciferase catalyzes the oxidative decarboxylation of D-luciferin, leading to the simultaneous production of 560 nm luminescence. This substrate offers convenient detection and precise quantification, making it widely used in life science research, particularly in areas such as small animal live imaging, reporter gene detection, and cell viability detection.

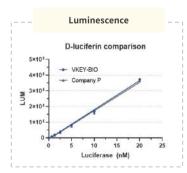
HO 
$$\sim$$
 S  $\sim$  S  $\sim$  ATP + O<sub>2</sub> + Mg<sup>2+</sup>  $\sim$  O  $\sim$  S  $\sim$  + AMP + CO<sub>2</sub> + Light

### **Product Advantages**

Each batch of KeyTec® D-luciferin potassium salt undergoes rigorous quality control tests, including NMR, MS, HPLC, chiral analysis, solubility test, and luminescence test, ensuring exceptional chemical and optical purity. It surpasses competition with its comprehensive testing, guaranteeing reliable and high-quality results.





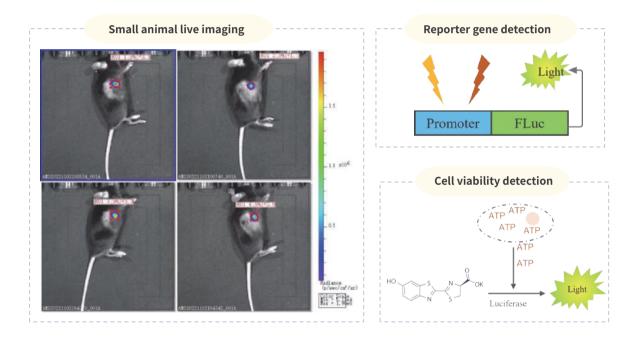




## **Product Details**

CAS	115144-35-9	Solubility	42 mg/mL in ddH <sub>2</sub> O at 25 °C	
MW	318.42 g/mol	Biological Activity	Superior luminescent performance	
Physical Characteristics	Pale yellow powder	Purity (HPLC)	≥ 99 %	
Storage	-20 °C	Chiral Purity	99 % e.e.	

# Application



# **Product List**

Brand	CAT	Description	Size
VKEY-BIO	A2001001N	KeyTec® D-LUCIFERIN POTASSIUM SALT	0.1 g
VKEY-BIO	A2001002N	KeyTec® D-LUCIFERIN POTASSIUM SALT	1.0 g